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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,875	04/12/2004	Byoung-Woo Cho	1749.1010	1817
21171	7590	08/02/2010	EXAMINER	
STAAS & HALSEY LLP			DURHAM, NATHANE	
SUITE 700			ART UNIT	
1201 NEW YORK AVENUE, N.W.			PAPER NUMBER	
WASHINGTON, DC 20005			3765	
			MAIL DATE	DELIVERY MODE
			08/02/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/821,875

**Applicant(s)**

CHO, BYOUNG-WOO

**Examiner**

NATHAN E. DURHAM

**Art Unit**

3765

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4, 6 and 7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 6 and 7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12 February 2010 (and amendment filed 8 January 2010) has been entered.

### ***Response to Amendment***

Applicant's amendment and corresponding arguments, filed 8 January 2010 (after filing of RCE dated 12 February 2010), have been reviewed and considered. Claim 1 has been amended and claims 3, 5, 8 and 9 have been canceled. Therefore, claims 1, 2, 4, 6 and 7 are currently pending. The applicant's amendment and corresponding arguments are not considered persuasive in overcoming the prior art rejection(s), as presented in the previous Office Action, for the reasons addressed below.

Firstly, the examiner notes that previous claims 1-8 were rejected under 35 U.S.C. 103(a) by Lo (U.S. Patent 6,493,880) and previous claim 9 was rejected under 35 U.S.C. 103(a) by Lo (U.S. Patent 6,493,880) in view of Uno et al. (U.S. Publication 2004/0016041). Since the applicant has cancelled claim 9, only the 35 U.S.C. 103(a)

rejection by Lo remains. Accordingly, only the Lo reference will be discussed in relation to the applicant's amendment and corresponding arguments.

In response to the previous Office Action, the applicant has amended independent claim 1 to include that "the at least one non-covered stretch yarn is a non-covered spandex yarn which is not covered by any covering yarn and the plurality of non-stretch yarns are synthetic yarns which are selected from the group consisting of Nylon, Polyester, Polyethylene Terephthalate (PET), Polyethylene (PE), and Polypropylene (PP)". Within the applicant's REMARKS, the applicant agrees that Lo discloses the non-stretch yarns being polyester (col. 5, lines 5-11 of Lo) (first page of applicant's remarks), however the applicant argues that Lo never mentions the non-stretch yarns being PET, PE or PP. The examiner notes that, based on the applicant's claim language, the Lo reference does not have to show the non-stretch yarns being anything other than one (i.e. polyester) of the group of yarn materials. Specifically note the applicant's claim language "the plurality of non-stretch yarns ... **which are selected from the group** consisting of ... Polypropylene (PP)". Accordingly, the entire group of materials does not have to be disclosed within the prior art reference. Lastly the applicant argues that the spandex yarn of Lo fails to be "not covered by any covering yarn". The examiner does not believe this negative limitation overcomes the Lo reference because Lo never mentions that the spandex yarn is covered by any covering yarn. Since Lo fails to disclose the use of a covering yarn on the spandex yarn, the spandex yarn of Lo is considered "not covered by any covering yarn". The applicant's sole statement reciting that "conventional stretchable thread ... is produced with a

spandex yarn at its core and non-stretch yarns twisted around the core to cover the spandex yarn" is not sufficient proof in implying that the "spandex yarn" of Lo is in fact covered with a covering yarn based only on the phrase "spandex yarn". Accordingly, the 35 U.S.C. 103(a) rejection by Lo still stands.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6 and 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Lo (U.S. Patent 6,493,880).

In regard to claims 1, 2 and 4, Lo discloses elastic headwear comprising: a head-covering portion being stretchable in at least a circumferential direction thereof having a plurality of pieces (col. 3, line 67 and col. 4, lines 1-4), at least one piece being made of a stretchable knitted mesh which comprises at least one non-covered stretch yarn and a plurality of non-stretch yarns (col. 5, lines 5-11); and a sweatband (25) being stretchable in at least a circumferential direction thereof (Col. 5, lines 16-17), wherein the non-covered stretch yarn and the plurality of non-stretch yarns are provided in rows without being twisted with each other. Lo discloses that the non-covered stretch yarn is a spandex yarn (col. 4, lines 61-62) wherein the spandex yarn of Lo is considered to be

"not covered by any covering yarn" (refer to response section above). Lo discloses that the non-stretch yarns can be polyester (col. 5, lines 5-11).

Note that the most important characteristic of the head covering is the ability to be stretchable in the circumferential direction. Lo discloses a knitted mesh (col. 5, lines 6- 7) and that the head covering portion be stretchable in the circumferential direction (col. 4, lines 1-4). Lo provides a clue to one of ordinary skill in the knitting art at col. 5, lines 6 & 7 where it is mentioned that a small amount of spandex is in the weft direction. If this were weft knitted, a statement of plying of feeding along with other yarn would be provided. Since stretch warp knit fabrics primarily receive their stretch characteristics from the stretch yarns, it is interpreted that the small amount of spandex in the weft direction implies a warp knit fabric. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a warp knitted mesh to produce the head covering portions that are stretchable in the circumferential direction as disclosed by Lo since Lo provides a clue to one of ordinary skill in the art of knitting that the fabric used is warp knitted fabric.

In regard to claim 6, Lo discloses that the front pieces of the crown are stiffened (col. 4, lines 41-44).

In regard to claim 7, Lo discloses that a common way for adjusting the size of the cap employs an adjustable strap disposed at the back of the cap for adjustment by the wearer (col. 1, lines 15-17). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lo's apparatus by including a size

adjustment member disposed on the rear pieces to further adjust the size of the crown portion since it is a common practice in the art.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHAN E. DURHAM whose telephone number is (571)272-8642. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary L. Welch can be reached on (571) 272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Nathan E Durham/  
Examiner, Art Unit 3765